



## *Cotton/Soybean Insect Newsletter*

Volume 16, Issue #17 Edisto Research & Education Center in Blackville, SC

20 August 2021

### **Pest Patrol Alerts**

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message often for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter “y” to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

### **Updates on Twitter**

When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at [@bugdocisin](https://twitter.com/bugdocisin) on Twitter.



### **News from Around the State**

**Jonathan Croft**, county agent in Orangeburg County, stated that his growers are noticing more defoliating caterpillars in soybeans. **Charles Davis**, county agent in Calhoun County, reported seeing “a good bit of parrot beaked bolls this week with the resulting internal damage. Also, a lot of square shed after the heavy rains this week. Stink bugs are hard to find but the damage isn’t.” I have also observed these symptoms this week in some of my plots we let go too far with stink bugs. They will “eat it up” if you don’t control them. Use the dynamic boll-injury thresholds for stink bugs in cotton!



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## Upcoming Field Day (moved to 16 September)

Our field day, originally scheduled for 2 September has been postponed a couple of weeks due to growing concerns over COVID. We will offer an in-person field day here at the Edisto REC on 16 September 2021. Registration will be from 8:00 to 9:00 AM. The morning program will cover peanuts and horticulture crops, with cotton, soybeans, and corn covered after lunch. The field day will conclude by 4:00 PM.

**\*\*POSTPONED – Peanut, Horticulture, and Agronomic Crops Field Day –  
New Date 9/16\*\***

August 18, 2021

Due to safety concerns Clemson University has decided to delay the 2021 EREC Field Day by 2 weeks.

The new target date is Thursday, September 16th.

If developments between now and then further affect the situation or result in a cancellation, this information will be shared as soon as it becomes available.

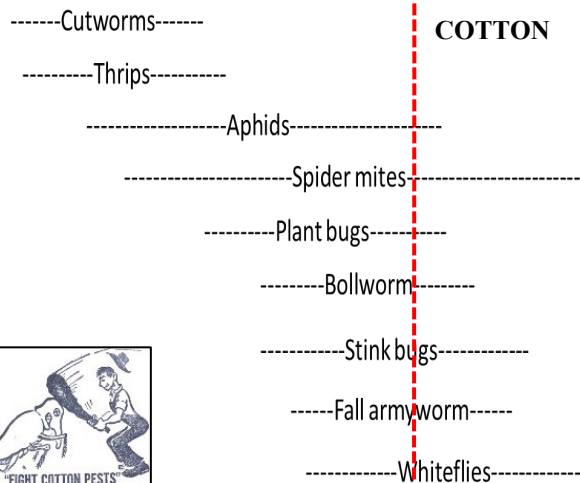
## Cotton Situation

As of 15 August 2021, the USDA NASS South Carolina Statistical Office estimated that about 100% of the crop is squaring, compared with 99% last week, 90% at this time last year, and 96% for the 5-year average. About 90% of the crop is setting bolls, compared with 79% last week, 74% at this time last year, and 82% for the 5-year average. The conditions of the crop were 11% excellent, 66% good, 23% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

## Cotton Insects

Stink bugs and bollworm are what we need to worry about right now. I am keeping this short for this week. If you have been monitoring symptoms of boll feeding using our dynamic boll-injury threshold, you have likely stayed ahead of stink bugs and have them under control. Checking the correct size bolls each week allows for ample monitoring of these hard-to-find bugs in the field. You should know what week of bloom you are in for each field. Once we get to the tail end of the season, the injury threshold goes up. Stay on top of stink bugs!

April May June July August September



Captures of bollworm moths in my pheromone traps here at Edisto REC have leveled off some, but I still think there is time for another peak flight of late moths. We will keep monitoring. Any cotton, especially 2-gene Bt cotton, planted late will be more susceptible to bollworm.

**Decision aid for stink bug thresholds in Southeast cotton**

- 1 Pull random sample of quarter size diameter bolls, avoid field edges. (boll sizes between 0.9" and 1.1")
- 2 1 boll / acre, no less than 25 / field.
- 3 Sort bolls into two piles: those with and those without, obvious external lesions.
- 4 Crack and inspect bolls with external lesions for internal damage (boll wall warts, stained seed or lint).
- 5 If threshold is not met for that week, (see chart) check the remaining bolls for internal damage.
- 6 Treat field only if the threshold is met for that week.

Bolls should fit through the large hole but not the small one.

Week of bloom	Threshold (% internal boll damage)
1	50%
2	30%
3	10%
4	10%*
5	10%*
6	20%
7	30%
8	50%

\*Consult state guidelines for scouting intervals.

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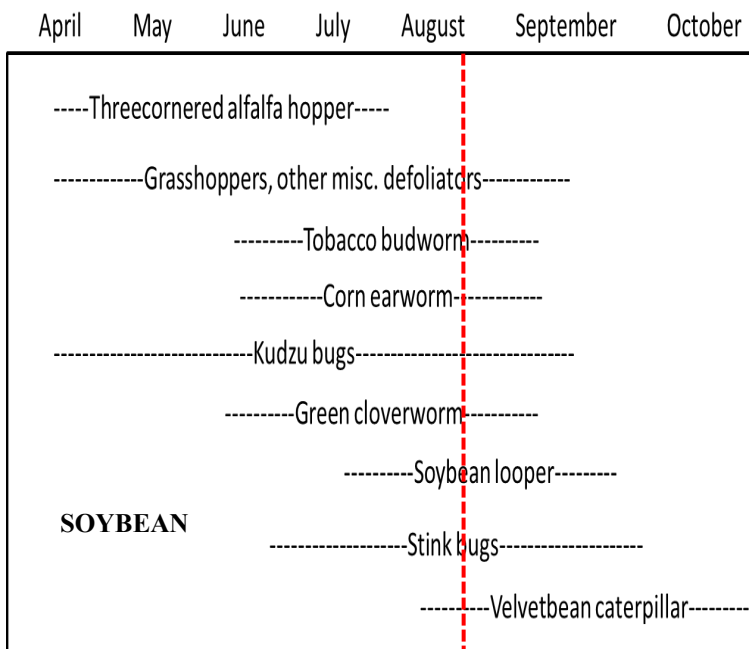


### Soybean Situation

As of 15 August 2021, the USDA NASS South Carolina Statistical Office estimated that about 75% of the crop has bloomed, compared with 65% the previous week, 66% at this time last year, and 72% for the 5-year average. About 33% of the crop is setting pods, compared with 20% the previous week, 35% at this time last year, and 32% for the 5-year average. The conditions of the crop were 12% excellent, 75% good, 13% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

### Soybean Insects

Soybean loopers (SBL) are definitely here, as are other migratory species, but the predominant defoliator I have been seeing is SBL. Use our 15% defoliation threshold (after bloom), and go find out what species are causing the injury. You only need an expensive lep material, if it is SBL causing the loss of leaf material. All other defoliating caterpillars can be controlled with an inexpensive pyrethroid. Podworms have also been very noticeable in our samples, so check for these seed feeders also. They cause direct yield loss, as they feed on the harvestable seeds. Protect your beans from this complex next week. I have seen a dramatic increase in stink bug numbers this week. In my plot samples, I observed many mating pairs and a lot of nymphs hatching out from eggs. I think many of these stink bugs have left dried corn fields in search of green hosts on which to finish the season. So, I think we are about to see stink bugs explode in soybeans.



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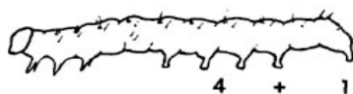
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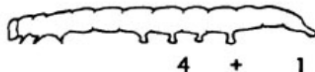
As moth activity increases, deposited eggs will yield caterpillar pests on soybeans. It is good skill to be able to identify adult moths flying around in fields. Use this chart to study moth and caterpillar identification.



## FIELD KEY TO COMMON SOYBEAN CATERpillARS



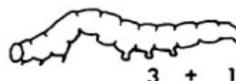
**CORN EARWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



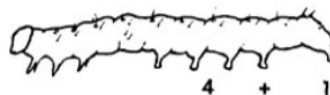
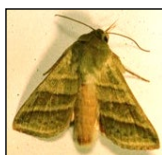
**VELVETBEAN CATERPILLAR**  
4 + 1 pair prolegs  
Very active when handled



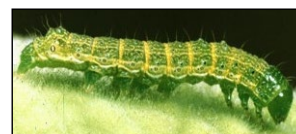
**SOYBEAN LOOPER**  
2 + 1 pair prolegs  
Fatter at tail end  
Looping movement



**GREEN CLOVERWORM**  
3 + 1 pair prolegs  
Not fatter at tail end  
Looping movement



**TOBACCO BUDWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



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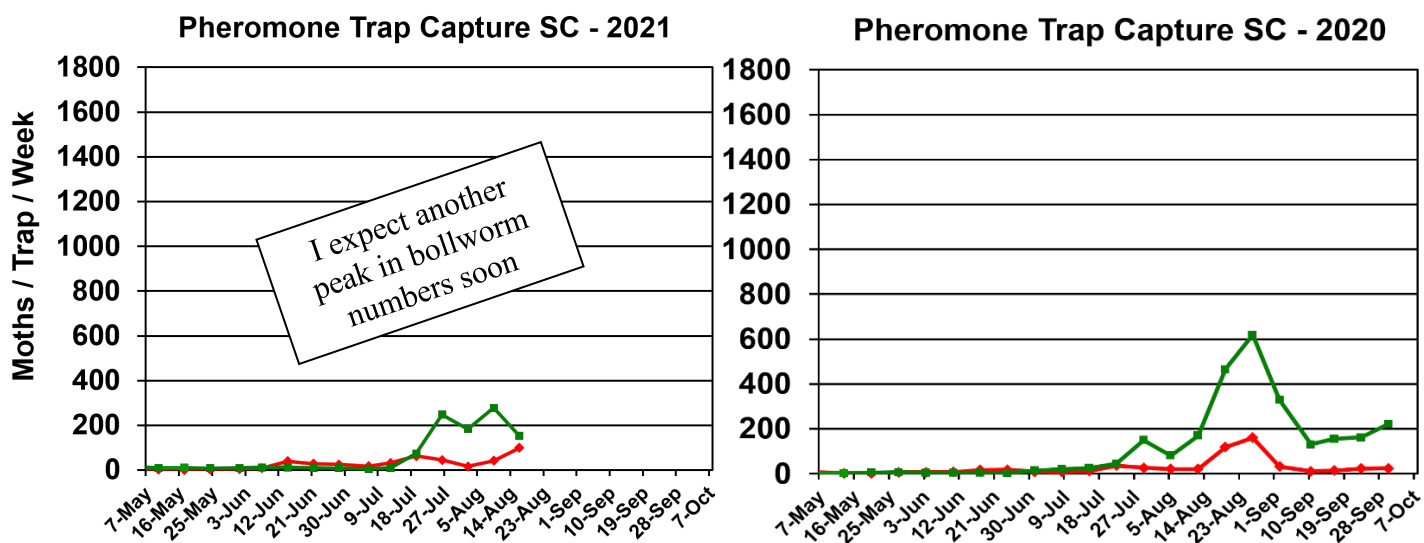
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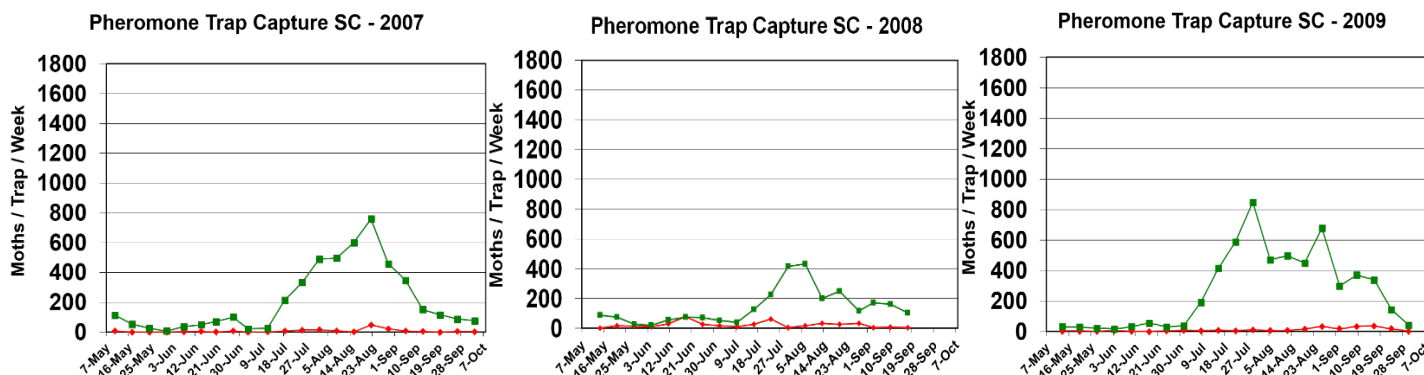
### Bollworm & Tobacco Budworm



Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2020 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state but are useful for general trends.



Trap data from 2007-2019 are shown below for reference to other years of trapping data from EREC:



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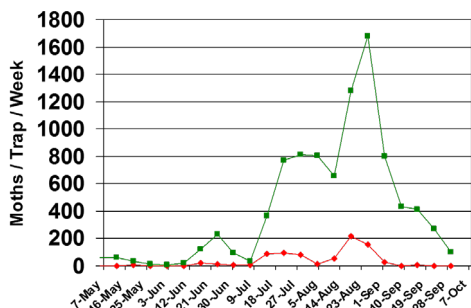
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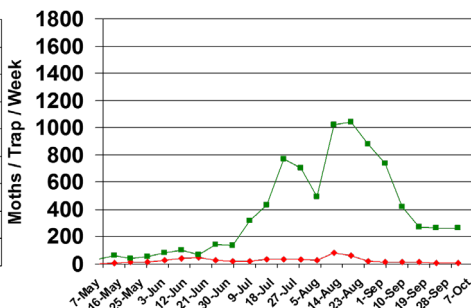




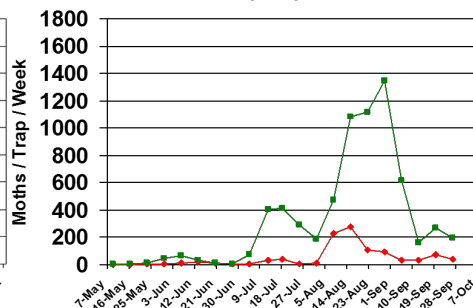
Pheromone Trap Capture SC - 2010



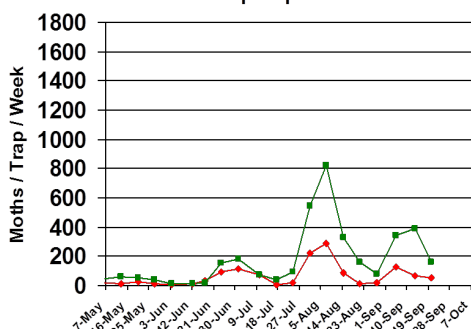
Pheromone Trap Capture SC - 2011



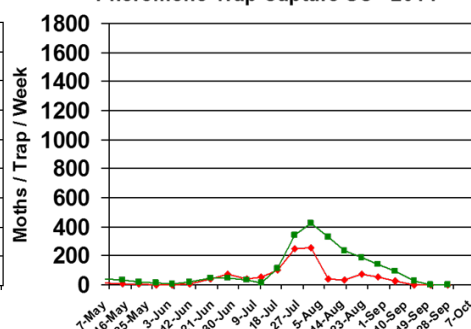
Pheromone Trap Capture SC - 2012



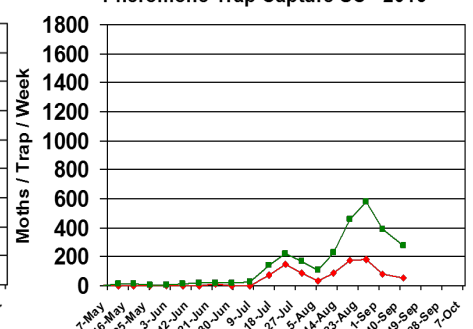
Pheromone Trap Capture SC - 2013



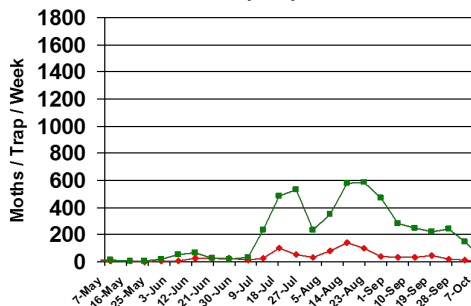
Pheromone Trap Capture SC - 2014



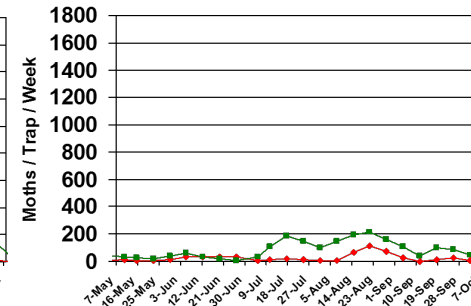
Pheromone Trap Capture SC - 2015



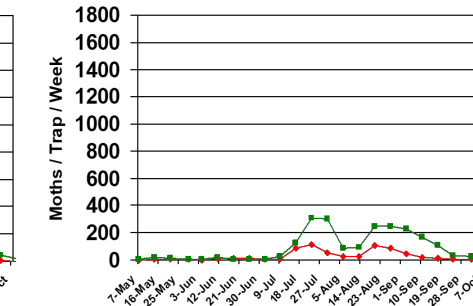
Pheromone Trap Capture SC - 2016



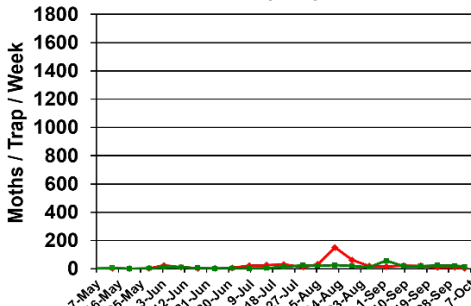
Pheromone Trap Capture SC - 2017



Pheromone Trap Capture SC - 2018



Pheromone Trap Capture SC - 2019



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### **Pest Management Handbook – 2021**

Insect control recommendations are available online in the 2021 South Carolina Pest Management Handbook at:

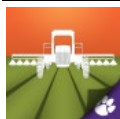
<https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

### **South Carolina Crops Blog**

The SC Crops Blog contains content about production of major row crops at the following link, if you want more information: <https://blogs.clemson.edu/sccrops/>

Archived issues of the Cotton/Soybean Insect Newsletter can be viewed at a convenient link on the SCCrops page. Contact **Dr. Michael Plumblee**, if you have any questions about the blog.

### **Free Mobile Apps: “Calibrate My Sprayer” and “Mix My Sprayer”**



Download our free mobile apps called “Calibrate My Sprayer” and “Mix My Sprayer” that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):

<http://www.clemson.edu/extension/mobile-apps/>

### **Need More Information?**

For more Clemson University Extension information: <http://www.clemson.edu/extension/>

For historical cotton/soybean insect newsletters:

<https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

Jeremy K. Greene, Ph.D.  
Professor of Entomology



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